AMENDMENTS TO THE CLAIMS

The following listing of claims shows the status of every claim that is, or ever was, in the instant application. This listing will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1 (Previously presented.) A device for producing the flow of electrons due to solar energy being incident thereon comprising:

at least one solar cell photovoltaic substrate material comprising at least one primary band gap and: (1) at least one primary frequency, (2) at least one harmonic frequency and (3) at least one heterodyne frequency of sunlight associated therewith, wherein said photovoltaic substrate material generates electron flow responsive to a photoreactive portion of the solar spectrum; and

at least one means for modifying at least a portion of the photoreactive portion of the solar spectrum of sunlight, said at least one means being positioned between said at least one solar cell substrate material and incident sunlight containing said photoreactive portion, whereby said at least one means restricts approximately only destructively interfering frequencies of light within the photoreactive portion of the solar spectrum, which do not correspond to: (1) said at least one primary frequency, (2) said at least one harmonic frequency and (3) said at least one heterodyne frequency from becoming incident upon the solar cell photovoltaic substrate.

2 (Previously presented.) The device of claim 1, wherein said at least one means for modifying at least a portion of the photoreactive portion of the solar spectrum from sunlight comprises at least one material.

3 (Previously presented.) The device of claim 2, wherein said at least one material comprises at least one cover material which covers at least a portion of at least one surface of said at least one solar cell photovoltaic substrate material.

4 (Previously presented.) The device of claim 1, wherein said at least one substrate material comprises at least one semiconductor material.

5 (Previously presented.) The device of claim 4, wherein said at least one semiconductor material comprises at least one material selected from the group consisting of amorphous silicon, crystalline silicon and cadmium sulfide.

6 (Canceled).

7 (Previously presented.) The device of claim 1, wherein said destructively interfering frequencies of light within the photoreactive portion of the solar spectrum of sunlight correspond to at least one frequency which distinctly interferes with the flow of electrons.

8 (Previously presented.) The device of claim 7, wherein said at least one frequency comprises a plurality of frequencies.

9 (Previously presented.) The device of claim 7, wherein said at least one means for modifying comprises at least one filter.

10 (Canceled).

11 (Previously presented.) The device of claim 1, wherein said destructively interfering frequencies of light within the photoreactive portion of the solar spectrum comprise frequencies other than those frequencies which are distributed symmetrically about said at least one primary frequency and which correspond to less than about one-half of the maximum amplitude associated with said at least one primary frequency.

12 (Previously presented.) The device of claim 1, wherein said destructively interfering frequencies of light within the photoreactive portion of the solar spectrum comprise frequencies other than those frequencies which are distributed symmetrically about said at least one harmonic frequency and which comprise those frequencies which correspond to less than half of the maximum amplitude associated with said at least one harmonic frequency.

13 (Previously presented.) The device of claim 1, wherein said destructively interfering frequencies of light within the photoreactive portion of the solar spectrum comprise frequencies other than those frequencies which are distributed symmetrically about said at least one heterodyne frequency and which comprise those frequencies which correspond to less than about one-half of the maximum amplitude associated with said at least one heterodyne frequency.

14 (Currently amended.) A method of increasing the efficiency of a solar cell photovoltaic substrate material, said solar cell photovoltaic substrate material comprising at least one primary band gap comprising:

determining at least one set of destructively interfering energies occurring within at least a portion of the photoreactive portion of the solar spectrum, said at least one set of destructively interfering energies not corresponding to at least one primary frequency, at least one harmonic frequency and at least one heterodyne frequency associated with said at least one primary band gap, which photoreactive portion, when applied to a solar cell photovoltaic substrate material, results in the promotion of electrons to a conduction band, said conduction band being an inherent characteristic of said solar cell photovoltaic material;

determining at least one means for filtering sunlight, such that said at least one means for filtering reduces the amount of destructively interfering energies which do not correspond to: (1) said at least one primary frequency; (2) said at least one harmonic frequency and (3) said at least one heterodyne frequency, from being incident on said solar cell material; and

combining said at least one substrate material and said at least one means for filtering sunlight together to restrict approximately only destructively interfering incident frequencies of light within said photoreactive portion of the solar spectrum from being incident upon the solar cell photovoltaic substrate.

15 (Currently amended.) A method for determining destructively interfering energies from at least a portion of the photoreactive portion of the solar spectrum ~~from being incident on~~ for a solar cell photovoltaic substrate material comprising:

determining at least one primary band gap width present in said solar cell substrate material;

determining at least one primary frequency of light corresponding in energy to said at least one primary band gap width; and

determining at least one harmonic and at least one heterodyne of said at least one primary frequency of light within the photoreactive portion of the solar spectrum, whereby substantially all of said destructively interfering energies not corresponding to said determined at least one primary and said determined at least one harmonic and at least one heterodyne are determined.

16 (Currently amended.) The method of claim 15, wherein all undesirable harmonics and all undesirable heterodynes of said at least one primary ~~wavelength~~ frequency of light are determined.

17 (Previously presented.) The device of claim 1, wherein said photoreactive portion of the solar spectrum comprises wavelengths of light from about 300 nanometers to about 1400 nanometers.

18 (Previously presented.) The method of claim 14, wherein said photoreactive portion of the solar spectrum comprises wavelengths of light from about 300 nanometers to about 1400 nanometers.

19 (Previously presented.) The method of claim 15, wherein said photoreactive portion of the solar spectrum comprises wavelengths of light from about 300 nanometers to about 1400 nanometers.

20 (Previously presented.) The method of claim 14, wherein said destructively interfering energies from at least a portion of the photoreactive portion of the solar spectrum comprise undesirable frequencies, such undesirable frequencies being frequencies other than those desirable frequencies which are distributed symmetrically about a primary frequency which corresponds in

energy to at least one primary band gap width, said undesirable frequencies including substantially all of those frequencies which correspond to less than about one-half of the maximum amplitude associated with said primary frequency.

21 (New.) The method of claim 14, wherein said at least one means for filtering sunlight means comprises at least one filter.

22 (New.) The method of claim 14, wherein said destructively interfering energies within the photoreactive portion of the solar spectrum comprise frequencies other than those frequencies which are distributed symmetrically about said at least one primary frequency and which correspond to less than about one-half of the maximum amplitude associated with said at least one primary frequency.